Glady Fork Project

Scoping Notice

INTRODUCTION

The Monongahela National Forest (MNF) is proposing timber harvest, road management, wildlife habitat enhancement, and stream restoration activities within the Glady Fork watershed. An environmental impact statement (EIS) will be prepared for the Glady Fork project.

The Glady Fork Watershed Assessment (WA) was completed in May 2001. Management opportunities identified during the watershed assessment process were developed with an understanding of the interactions between land-use activities and the physical and biological environments within the Glady Fork watershed, and through direction provided under the Monongahela National Forest Land and Resource Management Plan (Forest Plan).

PROJECT AREA LOCATION

The Glady Fork project area boundary includes an estimated 23,562 acres of National Forest System lands and an estimated 11,884 acres of privately owned lands, totaling 35,446 acres. The project area is located approximately 10 miles east of Elkins, West Virginia in Randolph and Tucker Counties. Panther Camp Run forms the northern boundary, Middle Mountain Road (FR 14) forms the eastern boundary, the Randolph County/Pocahontas County line forms the southern boundary, and the ridgeline that separates the Glady Fork from the Shavers Fork forms the western boundary. Please see enclosed vicinity map.

FOREST PLAN DIRECTION

Under the Monongahela Forest Plan, the Forest is divided into planning areas, referred to as Opportunity Areas (OAs). Management prescriptions (MPs) are assigned to lands within each OA. Each MP has its own purpose, area description, desired future condition, and set of standards and guidelines for management.

The Glady Fork project area includes all or portions of 13 OAs. The primary management prescription found in the project area is MP 6.1, totalling an estimated 23,230 acres. The proposed activities fall entirely within MP 6.1.

The primary purpose of MP 6.1 is to manage for remote habitat species intolerant of disturbance. Secondary purposes of MP 6.1 are to manage for 1) a semi-primitive non-motorized type of recreational environment, 2) a mix of forest products, 3) a strategy for management of sites reverting from hardwood to conifer (pine and spruce) and the intermingled high site hardwood type.

PURPOSE AND NEED FOR ACTION

The purpose and need for action explains why the proposed action is needed. It was developed through an assessment of the current conditions of the project area in relation to the desired future condition described in the Monongahela Forest Plan. Information provided in the Glady Fork Watershed Assessment was also considered in development of the purpose and need.

The purpose and need for the Glady Fork proposed action is to:

1. Increase Forest Health

There is a need to improve forest health across the Glady Fork project area by increasing the species, structural, and age diversity of the forested stands. Improving forest health will help to ensure vigorous stands are found throughout the watershed over time.

Forest health is a perceived condition of the forest derived from concerns about such factors as its age, structure, composition, vigor, presence or unusual levels of insects and disease, and resilience to disturbance. For the purposes of this project, a watershed considered to have good forest health would 1) contain a balance of size, age, species, and structural diversity, 2) stands of trees would be vigorous, and 3) a natural level of native insect and disease would be found within stands scattered throughout the watershed.

For MP 6.1, the Forest Plan describes the desired future condition of the forest as "a mosaic of trees stands and openings with a near optimum quantity and dispersions of the habitat elements that feature the wild turkey and black bear, along with associated wildlife species. Management emphasis will focus on manipulation of the naturally occurring tree species composition to optimize hard mast production, age class distribution, and ensure a continuous supply of mast" (Forest Plan, p. 165).

Historically, disturbances such as wildfire, wind, ice storms, and insect and disease infestation created a mosaic of the forest stands across the eastern West Virginia landscape that varied in size, shape, age, and species. From the 1880s through the early 1900s, extensive timber harvesting occurred across the state. Construction of railroads doubled in the 1880s and then doubled again in the 1890s, allowing access to and transportation of the timber resource (Lewis, 1998). As a result, much of what is now the Monongahela National Forest had been clearcut by the late 1920s, including the Glady Fork area. For this reason, much of the Glady Fork watershed consists of closed-canopy even-aged forest, with over 77% of the forested stands between 60 and 90 years old.

There is a need to:

- Use regeneration harvests such as clearcuts, shelterwoods, and two-aged harvests to move towards a mosaic of age classes across the project area.
- Use intermediate harvesting such as thinning and crop tree releases to promote larger, older trees in existing stands by removing low quality, poorly formed, and diseased trees, which would allow the remaining healthy, well-formed trees to grow larger.

2. Improve Water Quality and Fish Habitat

There is a need to improve water quality and fish habitat by reducing sources of sediment from the existing road system, increasing large woody debris within stream channels, decreasing stream bank erosion, and increasing stream shading.

Forest Plan Goal XVI, addressing water quality, states that natural resources of the Forest should be protected from damage or degradation (Forest Plan, p 40). The Forest plan also provides direction to protect and enhance cold water streams that are suitable trout habitat (Forest Plan, Attachment 3, p. 124).

The health of the aquatic ecosystem within the Glady Fork project area has been influenced by the extensive clearcutting that occurred during the turn of the last century. The widespread harvesting and associated construction of roads and railroad grades increased storm flows causing channel cutting, sedimentation, and overall decreased channel stability. This was further compounded by the removal of most of the riparian vegetation causing increased stream temperatures. Removal of large wood from the stream channels caused by the widespread clearcutting also contributed to decreased channel stability. Recovery from the impacts of activities at the last turn of the century is a long-term process. Concerns exist in relation to elevated sediment levels, stream structure, and stream temperature.

There is a need to:

• Reduce sources of sediment by abandoning roads, improving the drainage on roads not needed for short-term use (storage), and maintaining roads.

Large woody debris (LWD) is an important component of healthy stream channels. Large trees that fall into streams provide structure that helps trap sediments, create channel complexity, create scour pools, provide hiding cover, dissipate stream energy, and improve channel stability. Most streams within the project area have limited LWD, which impacts the quality of fish habitat and channel stability.

There is a need to:

• Increase stream structure by placing LWD in stream channels.

Decreased stream shading resulting from reduced riparian vegetation associated with agricultural activities, dispersed camping, harvesting, and road construction has likely increased water temperatures. Increased water temperatures impact water quality and fish habitat.

There is a need to:

• Increase stream shading by planting riparian vegetation, such as willow, alder, and other native vegetation.

3. Enhance Habitat for Wildlife

There is a need to respond to existing opportunities to enhance wildlife habitat.

Goal IV of the Forest Plan is to "Improve the diversity of plants, animals, and stand conditions with an emphasis on the habitat needs for wild turkey, black bear, and associated species" (Forest Plan, p. 38). The primary purpose of MP 6.1 is remote habitat for wildlife species intolerant of disturbance. The desired future condition of MP 6.1 describes management emphasis on "manipulation of the naturally occurring tree species composition to optimize hard mast production, age class distribution, and ensure a continuous mast supply" (Forest Plan, p. 165).

The condition of the wildlife habitat in the Glady Fork project area is considered good. There are, however, opportunities to enhance habitat components for varying species.

Mast is a major source of forage for many wildlife species found in the Glady Fork project area, including black bear, gray squirrel, wild turkey, and white-tailed deer. Mast consists of fruit from trees and shrubs that do not disseminate in the wind, such as acorns, hickory nuts, walnuts, black cherries, and blackberries. The current mast production from the forested stands across the project area is considered very good. Because 77% of the forested stands across the watershed are between 60 and 90 years old, there is a concern that the primary mast-producing stands will begin to decline across the area over the same time period, reducing the amount of mast that is produced across the entire watershed. There are opportunities to treat stands to ensure high-quality mast is available across the watershed over time.

There is a need to:

- Use regeneration harvests to promote age class diversity in the forested stands across the watershed to ensure consistent mast production in the long-term, and
- Use treatments such as thinning, crop tree release, and planting activities to feature important mast-producing species, such as oak and black cherry.

Most of the National Forest lands across the Glady Fork project area consist of closed canopy forest. Species such as wild turkey, white-tailed deer, and black bear benefit from openings created in the forest canopy, which are then planted with grasses or shrubs. The Forest Plan states that at least 5% of the area should be maintained in permanent openings. Approximately 3% of the National Forest lands within the Glady Fork watershed are openings.

There is a need to:

 Develop wildlife openings on National Forest lands by removing the tree canopy and then planting grasses or shrubs to benefit species such as wild turkey, black bear, and white-tailed deer.

Until the late 1800s, coniferous forests consisting primarily of red spruce, covered more than 500,000 acres across West Virginia. These forests were almost completely eliminated by logging from 1880 to 1920 (Millspaugh 1891;Clarkson 1964). Today, spruce forests only occupy an estimated 60,000 acres across the state. Red spruce has continued to decline since the

1960s. The exact cause is unknown but it is likely that acid deposition (acid rain) could be a contributing factor (Stephenson 1993) combined with natural forces such as suppression by competing trees, foliage freeze injury (Mant, Livingston 1996), insects, and disease (Audley, et al 1998). This decline has occurred across the Glady Fork project area. The decline of red spruce is of concern because spruce stands provide important higher elevation wildlife habitat for species such as red-breasted nuthatch, snowshoe hare, and the endangered West Virginia northern flying squirrel.

There is a need to:

• Treat stands to promote red spruce and other conifers by releasing existing, suppressed conifers located in the understory

4. Provide Forest Products to the Local Communities

There is a need to respond to existing opportunities to offer a mix of commercial forest products to local and regional markets.

Goal VI of the Monongahela Forest Plan is to "Manage the vegetation on the Forest...in order to provide a sustained yield of timber, benefit other resources, and support the local economy with concern for environmental protection and cost efficiency". In addition, Goal VII is to "Provide a stable supply of Forest products to dependent wood using industry". Local and regional industry has a steady demand for wood fiber.

There is an opportunity to:

• Meet wildlife habitat and forest health needs through economically feasible timber sales.

PROPOSED ACTION

The following series of tables and descriptions provide a detailed summary of the proposed action to be analyzed under the Glady Fork EIS. Enclosed maps provide a visual display of the proposed action.

1. Commercial Timber Harvest

The proposed action includes 345 acres of two-age harvesting, 51 acres of clearcut, 96 acres of shelterwood, 797 acres of thinning, 20 acres of overstory removal, and 689 acres of crop tree release. In total, the Glady Fork project would harvest an estimated 1,998 acres. Approximately 1,205 acres would use helicopter yarding, while 793 acres would use conventional ground-based skidding.

Timber would be removed through commercial timber sales under even-aged silvicultural systems as described below and in Table 1: Proposed Timber Harvest. Please refer to the enclosed maps, which display the location of the proposed vegetation management activities.

Silvicultural Treatment Description

Clearcut: Clearcutting is proposed for stands with high components of shade tolerant species in the understory, such as striped maple and beech. These species grow well in shaded areas so removal of the overstory canopy would allow shade intolerant to moderately tolerant species such as black cherry, red oak, white ash, and yellow poplar to become established in the understory. The intent is not to eliminate striped maple and beech from the understory, but to decrease the competition from these species to allow other species, such as black cherry and red oak to regenerate and grow. Only wildlife reserve trees, red spruce, hemlock, white pine, dogwood, serviceberry, and trees under 1 inch in diameter would remain after harvest.

Two-Age: Two- aged harvest is proposed for stands with high numbers of trees possessing good form and health, which are expected to live until the next entry, estimated at 60 to 100 years. These stands contain a high component of shade intolerant to moderately tolerant species with low numbers or scattered patches of shade tolerant species such as striped maple and beech. Most of the overstory would be removed, leaving some good quality trees 8-16 inches in diameter to provide mast and seed for regeneration. Good quality trees are commercial timber species free of disease and able to produce a fairly straight stem of sawlog size quality. High quality trees are found in the dominant or co-dominant crown class (overstory), although some trees in the intermediate crown class (mid-story) may also be included.

Shelterwood: A modified shelterwood harvest is proposed for stands with few or no shade tolerant species in the understory, such as beech and striped maple. These stands contain high numbers of shade intolerant to moderately tolerant species in the overstory, such as oaks, hickories, and black cherry, but little to no regeneration of these species in the understory. An estimated 60-70% of the of the overstory would be removed, leaving shade intolerant to moderately tolerant trees 10-22 inches in diameter with good seed-bearing capabilities to allow for successful regeneration. Within 10 to 15 years, the residual trees would be removed to release the regeneration established after the initial entry. This proposal includes the initial harvest but does not include removal of the residuals trees in the future.

Thinning: The objective of thinning is to promote healthy, vigorous trees in existing stands by removing low quality, poorly formed, high risk, mature, and diseased trees, which would allow the remaining healthy well-formed trees to grow larger. Thinning is proposed in stands with the potential to increase growth and improve quality in the residual trees by freeing them from competition for light, water, and nutrients. The number of residual trees left after harvesting would vary, depending on stand conditions, but a general average would be estimated at 60-120 trees per acre of residual trees ranging in size from 6 to 22 inches in diameter.

Crop Tree Release: Crop tree release is similar to thinning, except that crop trees are identified and then trees touching the crowns of the crop trees are either girdled or cut. An estimated 50 crop trees per acres would be retained. Selected crop trees would consist of healthy, well-formed trees of species such as oaks, hickories, black cherry, sugar maple, red maple, yellow poplar, and white ash.

Overstory Removal: Stands proposed for overstory removal contain a healthy seedling and sapling understory. Most of the overstory would be removed to release the existing understory.

Red Spruce Release (RSR): Five of the areas proposed for two-age harvest, overstory removal, and thinning have been identified for red spruce release. The intent of red spruce release is to improve habitat for species such as the endangered West Virginia northern flying squirrel by increasing the conifer component in some stands that already contain some red spruce in the overstory and understory. These areas would retain all existing red spruce in the overstory and would release existing red spruce and other conifers in the understory.

Site Preparation with Hand Tools for Natural Regeneration (SP): Once stands have been harvested, site preparation with hand tools would occur to encourage natural regeneration in some stands. The objective of site preparation is to enhance germination, sprouting, and survival of natural regeneration. Site preparation includes cutting down residual trees between 1 and 5 inches in diameter, except red spruce, hemlock, white pine, dogwood, and serviceberry. This treatment opens up the forest floor to increased sunlight to improve seed germination potential, promotes sprouting of cut trees, and reduces shading that could inhibit the growth of shade intolerant and moderately tolerant species.

Herbicide Use (H): Herbicide use is proposed in clearcut and two-age harvest stands to inhibit competition in the regeneration. The EPA approved herbicide "triclopyr" would be applied to individual trees by using either a backpack sprayer or a hatchet and squirt bottle. All treatments would follow label guidelines and would be supervised by a State-certified applicator. There would be no mechanized equipment or broadcast spraying used.

Planting (P): Planting is proposed in some stands to improve species diversity. For this proposal, red oak, and disease resistant American chestnut would be planted in the proposed clearcuts.

Fencing (F): Fencing is proposed in some stands to protect regeneration from deer browse. The fencing would be constructed of woven-wire materials about 8 feet in height. The fence would remain in place for as long as 5-7 years, depending on the amount of time it takes for the regeneration to become established to the point of survival from deer browse.

TABLE 1: Proposed Timber Harvest

mp | Stand | Acres | Logging | Silvicultural | | Comp | Stand | Acres |

Comp	Stand	Acres	Logging System	Silvicultural Prescription	Comp	Stand	Acres	Logging System	Silvicultural Prescription
53	15	21	С	Crop Tree Release	43	37,38, 43, 44	27	O	Thinning
53	48	15	HC	Two-Age (H, SP, F)	43	39	23	С	Thinning
53	48	8	HC	Clearcut (H, SP, F, P)	43	61	22	O	Thinning- RSR (H, SP, F)
53	52	60	HC	Thinning	43	62	22	С	Crop Tree Release
53	53	18	HC	Clearcut (H, SP, F, P)	43	64	17	С	Two-Age (H, SP, F)
53	59	16	HC	Thinning	43	67, 68, 69	25	С	Two-Age (H, SP, F)
53	76	18	С	Thinning	43	72,73, 74, 75	33	HC	Thinning

Comp	Stand	Acres	Logging	Silvicultural	Ì	Comp	Stand	Acres	Logging	Silvicultural
			System	Prescription					System	Prescription
56	9	8	HC	Two-Age (H, SP, F)		44	16	3	HC	Two-Age (H, SP, F)
39	28	15	С	Two-Age-		44	17, 23	91	С	Crop Tree
				RSŘ			,			Release
				(H, SP, F)						
39	30	42	С	Thinning-		44	27, 38	84	С	Crop Tree
				RSR			,			Release
				(H, SP, F)						
39	35	20	С	Overstory		44	28,	20	HC	Crop Tree
				Removal-			30,			Release
				RSR			32, 33			
				(H, SP, F)						
40	5	33	С	Thinning-		44	28,	22	HC	Two-Age
				RSR			30, 33			(H, SP, F)
				(H, SP, F)						
40	20, 21	25	С	Clearcut		44	42	13	HC	Two-Age
				(H, SP, F,P)						(H, SP, F)
41	24,98	91	HC	Crop Tree		44	44,	22	HC	Two-Age
				Release			45, 48			(H, SP, F)
41	32,	47	HC	Crop Tree		44	51	12	HC	Two-Age
	62, 63			Release						(H, SP, F)
41	55	15	HC	Thinning		45	1, 6,	153	HC	Thinning
							8, 28			
41	59, 60	11	HC	Two-Age		45	9	22	HC	Shelterwood
				(H, SP, F)						(H, SP, F)
41	105	210	HC	Thinning		45	9, 10,	95	HC	Thinning
							32, 33			0
42	8	35	HC	Crop Tree		45	10, 33	24	HC	Shelterwood
	0.0			Release		4-	40	40		(H, SP, F)
42	8, 9	23	HC	Two-Age		45	16	46	HC	Crop Tree
40	40	45	110	(H, SP, F)		45	40.00	00	110	Release
42	13	15	HC	Crop Tree		45	16, 36	26	HC	Two-Age
42	20. 27	81	HC	Release		45	31	14	HC	(H, SP, F)
42	26, 27	81	HC	Crop Tree		45	31	14	HC	Two-Age
42	31	25	HC	Release		47	3	24	С	(H, SP, F)
42	31	25	пС	Two-Age (H, SP, F)		47	3	24	C	Two-Age
42	34	7	HC	Two-Age		47	7, 32,	25	С	(H, SP, F) Shelterwood
42	34	′	пС	(H, SP, F)		47	7, 32, 34	23	C	(H, SP, F)
43	4	17	HC	Crop Tree		47	8	54	С	Crop Tree
45	7	17	110	Release		77	0	J -1	C	Release
43	5	18	HC	Two-Age		47	9,35	50	С	Thinning
70		10	''0	(H, SP, F)		71	5,55	30		11
43	23,	18	С	Two-Age		47	9	25	С	Shelterwood
-5	24, 25	10		(H, SP, F)		7,		20		(H, SP, F)
43	32, 33	21	С	Two-Age		47	17, 18	6	С	Two-Age
'	02, 00	- '		(H, SP, F)		.,,	'', '0			(H, SP, F)
43	34	15	С	Crop Tree		47	17, 18	50	С	Crop Tree
.0				Release		''	17, 13	00		Release
Comp =	Compar	tmont	HC= Helic			SR= Red	Corugo E	Pologoo	1	1 10.0000

Comp = Compartment C= Conventional F= Fencing

HC= Helicopter
H= Herbicide Use
P= Planting

RSR= Red Spruce Release SP= Site Preparation

2. Road Management Activities

The proposed action includes 2.0 miles of new road construction, 25.5 miles of road maintenance, 3.3 miles of road storage, and 10.3 miles of road abandonment.

Table 2 displays the road management proposed Glady Fork project area. Please see the enclosed maps for the location of these roads.

Road Management Activities Description

New Construction: Three new segments of road construction are proposed. These roads are needed to provide access to proposed harvest units. Many of these units could be reached through the existing road system. However, these roads are low in the drainages, located adjacent to streams, and are proposed for abandonment. The new construction would be located high in the drainages, away from the streams, in order to minimize impacts to the water and fisheries resources

Maintenance: Road maintenance would occur on roads needed to access areas proposed for harvesting. This would involve activities such as adding stone to the road surface, adding culverts to improve drainage, cleaning culverts, grading, and clearing brush.

Storage and Abandonment: Roads have a major influence on the water and fish resources in a watershed. A long-term management plan for the Glady Fork watershed identifies roads for abandonment and storage. Completing the necessary work for road abandonment and storage would reduce chronic sources of sediment and would improve the health of the water resources over the long-term.

The long-term management plan identified roads proposed for storage as being needed for long-term management of the area, but not needed for this entry period. Roads proposed for storage would remain on the official records.

Storage of roads would include activities that would reduce chronic sources of sediment and would be made maintenance free. Depending on the road, activities may include culvert removal or placing large drain dips in front of culverts. The large drain dips would intercept water running towards the culverts, avoiding the risk of a plugged culvert causing a road failure. Some roads may also be ripped to a depth of approximately 12 inches and seeded. Roads put into storage status would be closed using a natural barrier or a gate

The long-term management plan identified roads that would not be needed for long-term management of the drainage. These roads would be abandoned and would be removed from the official records.

Abandonment activities would focus on allowing the road to function in a more natural condition. Depending on the road, activities may include removing culverts, outsloping, ripping the surface to a depth of about 12 inches, and seeding with vegetation. These roads would be blocked off from access by using natural barriers.

TABLE 2: Proposed Road Management

Road	Miles	Activity Description	Road	Miles	Activity Description
Α	0.8	New Construction	FR 187C	1.5	Storage
В	0.5	New Construction	FR 259A	0.2	Maintenance
С	0.7	New Construction	FR 259C	1.1	Maintenance
C-3	1.5	Abandon	FR 259CC	0.7	Maintenance
C-5A	1.4	Abandon	FR 366	1.1	Maintenance
C-5B	1.1	Abandon	FR 382	1.4	Maintenance
C-5C	1.1	Abandon	FR 385	2.8	Maintenance
C-5D	0.6	Abandon	FR 385C	0.7	Maintenance
WR-A	0.3	Abandon	FR 385D	0.2	Maintenance
FR 35	0.4	Maintenance	FR 422	2.4	Maintenance
FR 35A	0.4	Maintenance	FR 496	1.4	Maintenance
FR 44- Spur	1.0	Abandon	FR 499	0.7	Storage
FR 385F- Spur	0.1	Abandon	FR 799	0.7	Abandon
FR 153	1.3	Maintenance	FR 799A	0.8	Abandon
FR 155	1.2	Abandon	FR 800	0.5	Abandon
FR 183	3.3	Maintenance	FR 865	1.1	Storage
FR 183B	1.8	Maintenance	FR 1446	2.0	Maintenance
FR 187	FR 187 3.3 Maintenance		FR 1446A	0.6	Maintenance
FR 187B	0.4	Maintenance			

3. Stream Restoration Projects

The stream restoration projects have been designed to reduce the amount of sediment entering a stream channels, help stabilize channel banks, and improve overall water quality. The enclosed maps display the location of the proposed stream restoration activities. This proposal includes the projects listed below:

- Plant or seed willow, aspen, alder and other native trees and shrubs along Daniels Creek to provide shade and future large woody debris.
- Directionally fell trees into Daniels Creek, McCray Run, and Nichols Lane Run to provide LWD to improve channel stability and to provide stream structure. In some instances, the felled trees would be anchored in place with cable to ensure that they stay in place during periods of high water.

4. Wildlife Enhancement Projects

The proposed action includes 10 acres of savannah development, 56 acres of non-commercial red spruce release, and 6 acres of wildlife openings. In addition, the proposed action includes 132 acres of red spruce release to be completed as commercial timber harvest, previously described above under "Silvicultural Treatment Description" and in Table 1: Proposed Timber Harvest. A more detailed description is provided below.

Wildlife Habitat Enhancement Descriptions

Savannah: The proposed action includes one stand that would be converted to a savannah. The overstory trees would be removed through commercial timber harvest. A minimum of 5 wildlife trees (snags and culls) per acre would be left, along with up to 10 healthy mast-producing trees/per acre. The logging debris, also referred to as slash, would be moved into piles to create habitat for small mammals such as moles, voles, and rabbits. The area would then be seeded with a mixture of legumes and grasses to provide forage for wildlife.

Red Spruce Release: Red spruce release would occur in some stands that contain a component of red spruce in the understory and overstory to improve habitat for species such as the endangered West Virginia northern flying squirrel. The red spruce release described in this section would be non-commercial treatments.

In these stands, all red spruce in the overstory and understory would be retained. The low quality, poorly formed, and diseased hardwood overstory would be cut or girdled and left on site. The healthy oaks, black cherry, and hickories in the overstory would be retained.

Hardwood species in the understory such as striped maple and greenbrier would be cut and then treated with herbicide. This treatment opens up the forest floor to increased sunlight, reducing shading that could inhibit the growth of shade intolerant and moderately tolerant species, especially red spruce. Once the site preparation is completed, the areas would be fenced to protect the regeneration from deer browse.

Permanent Wildlife Openings: Permanent openings would be developed to provide open, grassy habitat for such species as white-tailed deer, wild turkey, and black bear. Once the overstory is cut down, the stumps would be grubbed out, and then the trees, stumps, and other logging debris would be pushed into piles. The area would be fertilized, seeded with native grasses, legumes, and wildflowers, and planted with shrubs or trees. Each opening would be approximately 3 acres in size.

TABLE 3: Proposed Wildlife Habitat Enhancement

Comp	Stand	Acres	Logging System	Treatment
53	48	10	HC	Savannah (H, SP, F)
43	12	19	N/A	Red Spruce Release (H, SP, F)
43	17	18	N/A	Red Spruce Release (H, SP, F)
44	5, 7, 9	19	N/A	Red Spruce Release (H, SP, F)
43	38, 43	3	N/A	Permanent Wildlife Opening
42	9, 31	3	N/A	Permanent Wildlife Opening